Title (en)

SECRET QUOTIENT TRANSFER DEVICE, SECRET QUOTIENT TRANSFER METHOD, AND PROGRAM THEREFOR

Title (de)

GEHEIMQUOTIENTÜBERTRAGUNGSVORRICHTUNG, GEHEIMQUOTIENTÜBERTRAGUNGSVERFAHREN, UND PROGRAMM

Title (fr)

DISPOSITIF DE TRANSFERT DE QUOTIENTS SECRETS, PROCÉDÉ DE TRANSFERT DE QUOTIENTS SECRETS, ET PROGRAMME

Publication

EP 3057078 B1 20190828 (EN)

Application

EP 14851517 A 20141003

Priority

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Abstract (en)

[origin: EP3057078A1] To provide a secret quotient transfer device that can reduce the communication cost. On the assumption that u denotes a natural number and represents a boundary value, m denotes an integer that satisfies a relation m #¤ 2 u , i denotes an integer from 0 to m-1, a plain text a is an integer that is equal to or greater than 0 and smaller than an arbitrary modulo p, the integers a and 0 are congruent modulo 2 u , and the plain text a is expressed as a sum of m sub-shares x 0 , ..., x m-1 , the secret quotient transfer device computes a quotient q of the division of a total sum a Z of the sub-shares by p according to q = E(i < m)x i mod 2 u .

IPC 8 full level

G09C 1/00 (2006.01); **H04L 9/08** (2006.01)

CPC (source: EP US)

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